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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/585,200

04/24/2007

Olaf Seupel

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EXAMINER

ANYIKIRE, CHIKAODILI E

ART UNIT

PAPER NUMBER

2482

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/585,200	<b>Applicant(s)</b> SEUPEL, OLAF	
	<b>Examiner</b> CHIKAODILI E. ANYIKIRE	<b>Art Unit</b> 2482	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 April 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 April 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. This application is responsive to application number (10/585200) filed on April 24, 2007. Claims 1-8 are pending and have been examined.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-8 rejected under 35 U.S.C. 102(e) as being anticipated by Song et al (US 2004/0257476, hereafter Song).

As per **claim 1**, Song discloses an arrangement for generating a pull-down switch-off signal for a video compression encoder, which signal is determined by the arrangement in dependence on a converted signal which is produced from an NTSC signal by means of an inverse 3:2 pull-down conversion, wherein the circuit arrangement includes a Mean Absolute Distortion detector and a circuit for determining Hadamard coefficients, wherein the MAD detector produces a MAD signal which indicates for each block of predefined size the difference between the picture contents

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of two consecutive frames, wherein the circuit for determining the Hadamard coefficients delivers two coefficients in blocks per frame, from which coefficients a first coefficient indicates the sum of the differences of the pixels of adjacent scanning lines  $i$  and  $i+1$  and a second coefficient indicates the sum of the differences of the pixels of scanning lines  $i$  and  $i+2$ , and wherein the pull-down switch-off signal is generated in dependence on the values of the MAD signal summed for all the blocks of a frame and in dependence on the two Hadamard coefficients summed for all the blocks of a frame (paragraphs [0022]-[0023] and [0025]; Song discloses using SAD which is commonly used in the art similar to MAD values and the Song further discloses the detection of Hadamard coefficients).

As per **claim 2**, Song discloses an arrangement as claimed in claim 1, characterized in that the pull-down switch-off signal signals a switching off when the MAD value summed for each frame exceeds a predefined threshold, and/or signals a switching off when the quotient from the first Hadamard coefficient summed frame-by-frame and the second Hadamard coefficient summed frame-by-frame at one or more predefinable positions within a predefinable number of pull-down four-cycles of the converted signal exceeds a predefinable threshold (paragraph [0026]-[0027]; Song discloses comparing the SAD values against a threshold).

As per **claim 3**, Song discloses an arrangement as claimed in claim 2, characterized in that the pull-down switch-off signal signals a switching off of the inverse 3:2 pull-down conversion when at at least one predefinable position within a predefinable number of pull-down four-cycles of the converted signal the value of the

quotients of the assigned Hadamard coefficients lies a predefinable value above or below the average of the summed quotients of the Hadamard coefficients of all the positions of this pull-down four-cycle (paragraph [0025]).

As per **claim 4**, Song discloses an arrangement as claimed in claim 3, characterized in that the pull-down switch-off signal signals a switching off of the inverse 3:2 pull-down conversion when at one of the positions one, two or three within three consecutive cycles of the converted signal the value of the summed quotients of the assigned Hadamard coefficients lies about 10% above or below the average of the quotients of the Hadamard coefficients of all the position of this pull-down four-cycle, wherein the position two within one cycle of the converted signal represents the position whose converted frame was recovered from two different frames of the unconverted signal (paragraphs [0025]-[0027]).

As per **claim 5**, Song discloses an arrangement as claimed in claim 1, characterized in that the pull-down switching signal signals a switching off of the inverse 3:2 pull-down conversion if the MAD signal summed frame-by-frame exceeds three times the average value from the MAD values of a predefinable number of previous frames (paragraph [0026]-[0027]).

As per **claim 6**, Song discloses an arrangement as claimed in claim 1, characterized in that the MAD detector and the circuit for determining the Hadamard coefficients are provided in common for the arrangement and for an MPEG encoder for which the pull-down switch-off signal is provided (paragraph [0025]; these transforms are apart of the MPEG standard).

As per **claim 7**, Song discloses an arrangement as claimed in claim 1, characterized in that the pull-down switch-off signal is provided for an MPEG2 or MPEG4 encoder (paragraph [0025]).

As per **claim 8**, Song discloses use of the arrangement as claimed claim 1 in a DVD recorder (paragraph [0005]).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHIKAODILI E. ANYIKIRE whose telephone number is (571)270-1445. The examiner can normally be reached on Monday to Friday, 7:30 am to 5 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (571) 272 - 7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Marsha D. Banks-Harold/  
Supervisory Patent Examiner, Art Unit 2482

/Chikaodili E Anyikire/  
Examiner, Art Unit 2482